

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Oak Ridge**

Site Summary Level: **Weldon Spring Site**

Project **OR-775 / Weldon Spring Disposal Facility**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0160**

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

PURPOSE:

The Weldon Spring Site is located in St. Charles County, Missouri, about 48 km (30mi) west of St. Louis. The site consists of two geographically distinct areas: the 88-ha (217-acre) chemical plant area, which is 3.2 km(2 mi) southwest of the junction of Missouri (State) Route 94 and U.S. Route 40/61, and a 3.6-ha (9-acre) limestone quarry, which is about 6.4 km (4 mi) south-southwest of the chemical plant area. The Army initially used the site during the 1940s to produce the explosives TNT and DNT. After extensive demolition, decontamination and regrading, the U.S. Atomic Energy Commission (AEC) built the chemical plant to process uranium and thorium ore concentrates during the 1950s and 1960s.

Radioactively and chemically contaminated waste was disposed of at the site during the latter period and both the Army and the AEC disposed of waste in the quarry from the 1940s through the 1960s.

Because of the Department of Army's (DA) involvement with the history of the site a Memorandum of Understanding (MOU) between DA and DOE was signed in February 1985 transferring ownership to DOE and establishing a cost-sharing arrangement for the WSSRAP between DOE and DA. Since then, the DOE's Oak Ridge Operations Office has administered the Weldon Spring Site as Major Project #182, Weldon Spring Site Remedial Action Project. In 1986 the Environmental Protection Agency and DOE signed a Federal Facilities Agreement, which was amended in 1992.

The purpose of the WSSRAP Disposal Facility project is the environmental restoration of the chemical plant and quarry areas so as to place them in a radiologically/chemically safe condition in accordance with DOE guidelines so as to eliminate potential hazards to the public and the environment.

SCOPE:

The scope of the WSSRAP Disposal Facility project includes:

- Preparation; environmental agency review and approval; and public review and approval of environmental documentation containing the data collected, its analysis, and rationale for the remediation solution selected.
- Construction, operation, decommissioning and dismantling of quarry and chemical plant site water treatment plants to treat and release contaminated surface water.
- Excavation and temporary storage of contaminated soil, rubble and equipment from the quarry.
- Decontamination, dismantling and temporary storage of the chemical plant site's 44 buildings, foundations and associated structures.
- Excavation and temporary storage of contaminated soil and rubble from several identified vicinity properties near the WSSRAP chemical plant site.
- Construction of, and placement of waste in an engineered disposal facility designed to isolated the contaminated wastes from the public and the

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environment for the foreseeable future.

- Construction, operation, decommissioning and dismantling of all structures and facilities required to support the excavations, temporary storage, disposal facility construction waste placement and disposal facility closure during the life of WSSRAP.

- Restoration of all remediated sites and release of as much of the project area as possible.

TECHNICAL APPROACH:

QUARRY:

A water treatment plant was built at the quarry to treat the water as the quarry pond was drained. Treated water has been tested and released in batches to the Missouri River. In conjunction with the quarry pond draining, bulk waste has been excavated from the quarry using heavy construction equipment. The excavated quarry bulk wastes have been transported via a dedicated haul road connecting the quarry to the chemical plant site. At the chemical plant site a Temporary Storage Area (TSA) was constructed to store the quarry bulk wastes until they can be placed in the disposal facility. The TSA is a lined area with perimeter berms. Wastes stored in the TSA are isolated from the surrounding environment and the interior is sloped so that any surface runoff is collected in a sump from which it is pumped to a site water treatment plant where it is treated and released to the Missouri River. Quarry bulk waste removal drainage of the quarry pond were completed in October of 1995. The quarry water treatment plant will be dismantled when it is no longer needed by the project. Salvageable components will be redeployed and the remains will be placed in the disposal facility. The quarry site will then be restored. The quarry haul road will be transferred to the Missouri Department of Conservation when it is no longer needed by the project. After the quarry wastes have been placed in the disposal facility the TSA will be dismantled, its wastes placed in the disposal facility and its site will also be restored. The quarry will be released to the appropriate agency(ies) for final disposition.

CHEMICAL PLANT SITE:

A water treatment plant was built at the chemical plant site to treat surface runoff, water generated during remediation activities and water accumulated in four raffinate pits. This plant will operate until just prior to closure of the disposal facility, at which time it will be dismantled, appropriate components salvaged and unrecoverable remains placed in the disposal facility. All but one of the process buildings have been dismantled and the rubble temporarily placed in a Material Storage Area (MSA) until it can be placed in the disposal facility. Asbestos containing materials (ACM) from the buildings and piping have been temporarily stored on-site in Sea-Land containers until they can be placed in the disposal facility. The removal of the process buildings has been followed by the removal of their foundations and associated contaminated soils. The foundation rubble and contaminated soils are temporarily stored in the Ash pond Storage Area. The disposal facility will be built on the former site of the process buildings. After the foundation and contaminated soils have been removed the site will be prepared for construction of the disposal facility by placement of low permeability soil obtained from a nearby Borrow Area developed by the project as a source for low perm material for the base of the disposal facility as well as the dikes which form the sides of the disposal facility. This Borrow Area development was completed in the summer of 1996 along with a dedicated haul road connecting the Borrow Area with the chemical plant site. Construction of the disposal facility began in 1997 with waste placement continuing until 2001 when the disposal facility will be closed and the final cap installed. While the disposal facility is under construction contaminated soil from several nearby vicinity properties will be excavated and temporarily stored until it can be placed in the disposal facility. It is also assumed that the project will accept an additional small quantity of contaminated soil from the adjacent Department of Army site. Wastes from the raffinate pits which are being excavated and treated under the associated WSSRAP Waste Treatment Project will also be placed in the disposal facility. Just prior to closure of the disposal facility the liners and other contaminated materials from the temporary storage areas and any

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other support facilities will be placed in the disposal facility and those areas will be restored. The Borrow Area and borrow haul road will both be restored. The chemical plant site, except for the disposal facility and its buffer will then be released to the appropriate agency(cies).

Project Status in FY 2006:

Under current funding assumptions, the WSSRAP Disposal Facility Project will be completed in September 2002. Minimal environmental monitoring and site maintenance will be required thereafter under a Long-term Surveillance and Maintenance Project to be administered by the Grand Junction DOE Office.

Post-2006 Project Scope:

None - Under current funding assumptions this project will be completed prior to 2006.

Project End State

Upon project completion a disposal cell and appurtenances will occupy approximately 62 acres of the Chemical Plant Site. The remainder of the Chemical Plant Site will be released to the appropriate agency(ies) for unrestricted use. The quarry will be released to the appropriate agency for recreational use. Long-term monitoring and surveillance at the chemical plant site and the quarry will be carried out under an other project.

Cost Baseline Comments:

The costs in this PBS are based on the Weldon Spring Site Remedial Action Project Baseline. This cost baseline varies from prior versions due to funding reductions in FY 2000.

Safety & Health Hazards:

The hazards associated with the Weldon Spring Remedial Action Project (WSSRAP) can be categorized as follows:

Radiological: Uranium (235, 238); thorium (230, 232); radon gas (220, 222); radium (226, 228), and radon-daughter products comprise the main radiological contaminants. Uranium and thorium commonly exist in the following matrices: Soil, Water, and Sludge. Some airborne contamination is also possible, depending on work activities.

Chemical: Nitroaromatic compounds (TNT/DNT); volatile and semi-volatile organic compounds (hydrocarbons, alcohols, etc.); heavy metals; acids and alkalis; PCBs; nitrogen-containing compounds; paint contaminants (lead, cadmium); and mercury, comprise the main chemical hazards. Asbestos, asbestos-containing material, and man-made mineral fibers are also present. These contaminants are present in the following matrices: Soil, Water, Sludge, and Air.

Physical and Biological: Hazards in this category include heat and cold stress, noise, vibration, tick and other insect bites, exposures to poison ivy, and potential bites of venomous or non-venomous snakes.

Industrial and Construction: Several industrial and construction-type hazards are associated with the daily ongoing activities at WSSRAP. A concise listing of these hazards is provided below:

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Slips/trips/falls; electricity; confined spaces; water; overhead and elevated work; heavy equipment operation; structural failures; load shifting; sharp objects; torch and plasma arc cutting; material handling and storage; power equipment usage; excavation; heavy load lifting; motor vehicles and traffic; and clearing/grubbing and demolition work.

Fire and Explosion: Fire and explosion hazards exist with the following type of activities: torch and plasma arc work; electrical short circuits; lightning strikes; brush fires; introducing ignition sources near the onsite fuel tanks, flammable storage cabinets, and sheds; process testing; and potential mixing of incompatible chemical wastes.

Hazard Identification and Analyses:

Work Package numbers usually tasks all work activities at the WSSRAP. There are several methods that are utilized to identify the health and safety hazards associated with each work package prior to the work being conducted in the field. The various methodologies are mentioned below, along with a brief discussion of how each particular process functions:

1. Hazard Categorization, Safety Analysis, Facility Safety, and Readiness Assessment Documents: These comprehensive documents are generated by the ES&H Department to assess onsite facilities as to their safety and potential hazards they could pose on the worker population and environment in event of natural, man-made, or other disasters. Each active facility at WSSRAP has been reviewed and categorized in accordance with DOE Orders 5480.23 and 5481.1B.

2. Health and Safety Plans, Safe Work Plans, Task-Specific Safety Assessments (TaSSA), and ES&H Review Forms: These are documents that are generated prior to the conduct of tasks at the WSSRAP. The HASP is an overall document that governs a particular work package. Safe Work Plans (SWP's) are documents developed by a subcontractor (with assistance from the Contractor), that are specific to various categories of tasks and also identifies the potential physical, and exposure hazards associated with those activities. The TaSSA is a WSSRAP-specific document that may be used in lieu of a SWP and is applicable to single individual tasks, which may have potential health and safety implications. ES&H Review Forms are also WSSRAP-specific, and this program is similar to the USDOE's Enhanced Work Planning forms. These forms are generated by ES&H Department Field Supervisors for virtually every task, which can be perceived to have health and safety hazards associated with them. Among other things, each ES&H Review Form lists and quantifies the chemical and radiological hazards, the personal protective equipment to be utilized for that individual task, and decontamination procedures that are to be followed.

Each SWP and TaSSA is reviewed by a group of peers and/or supervisors, and require their signatures along with those of the work crew prior to the activity being conducted. It is considered a Safety Violation should work crews fail to review the applicable TaSSAs or SWPs prior to commencing a work activity.

The above-mentioned hazard-assessment processes will continue through the completion of the project with the conclusion of the Disposal Cell, expected in 2002 AD.

Safety & Health Work Performance:

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The variegated nature of the remedial activities performed at the WSSRAP make it necessary to maintain and implement several types of administrative controls. The single common goal of these controls is a "no compromise" attitude on health and safety issues during the various work activities. The controls mentioned below are in addition to the Hazard Identification and Analysis mechanisms outlined in our response to Item S.12.1.

1. Management Commitment and Leadership: WSSRAP's Project Management is firmly committed to setting the highest priorities on environmental, and health and safety issues. These include public safety and health, worker protection, and environmental preservation and restoration. All project activities are executed in a manner that reflects the project's full commitment to these priorities. Management's commitment to health and safety is exemplified by the following documents:

- WSSRAP Health and Safety Policy
- Project Director's I.O.C to All Site Personnel - DOE's Occupational Safety and Health Policy

These policies are continually reinforced during departmental staff meetings, weekly Tuesday/Thursday safety meetings, annual refresher training programs, and inter-office correspondences. WSSRAP's application to obtain the Star Status under the DOE's Voluntary Protection Program is currently under review.

2. Employee Involvement Programs: WSSRAP has several mechanisms to include employee participation so as to maintain high health and safety standards. Chief among these are the "Time Out For Safety", "Blue Card", "Teaming To Improve Productivity and Safety", "Project Director's Round Table Sessions", "Safety, Quality, and Enjoyment Ballots", "All Hands Meetings", "Responsibility Assignment Matrix" Teams, 16 different "Safety Committees", etc. Work crew concerns are paid close attention to and several positive suggestions have resulted in constantly improving and better work practices within WSSRAP. Teamwork is strongly encouraged in the conduct of all operations. Employee involvement has proven to be an effective form of control to protect workers from health and safety hazards at the WSSRAP.

3. Safe Work Plan Meetings and Employee signoffs: These meetings are mandatory and are held prior to the startup of work activities each day. Employees associated with the work are required to sign the respective SWPs, implying that they have read and understood the hazards of the work and shall follow the correct procedures to conduct the work to minimize any associated health and safety risks. It is considered a Safety Violation should work crews fail to review the applicable TaSSAs or SWPs prior to commencing a work activity. TaSSAs and SWPs are required to be present/posted at the actual work location and are subject to inspection at any time.

4. Formal Documentation: As mentioned above, due to the requirements of DOE Orders 5480.23, and 5481.1B, WSSRAP is contractually bound to produce and maintain Hazard Assessment/Categorization and Safety Analyses documentation. Certain projects also progress to their startup via Operational Readiness Reviews, which is a system of checklists of required items that have to be satisfied and peer-reviewed prior to Project Management authorization to startup. In addition, WSSRAP utilizes a change control process, which requires review of proposed changes prior to implementation to ensure that the safety of the activity or facility is not compromised.

5. HASPs: HASPs are a requirement for WSSRAP per the OSHA HAZWOPER regulation. All work packages and bid packages include a copy of the applicable HASP, under which all field operations are conducted. The HASP details the various Federal, State, Local, and DOE requirements and regulations applicable to conduct work at WSSRAP.

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6. Training Programs: WSSRAP has an onsite Training Department which offers all new employees sufficient training about the site and indoctrinates them on the health and safety aspects of conducting work for the project. All new employees receive General Employee Training (GET). Those employees who work in the controlled areas of WSSRAP also receive General Employee Radiological Training (GERT) and Safety Health and Radiation Protection (SHARP) Training.

7. Field Implementation of WSSRAP Health and Safety Policies: There are several departments and line organizations that work together to maintain and implement WSSRAP's commitment to the community. Primary functional responsibilities for health and safety are incumbent upon the ES&H and Safety Departments. Implementation in the various project areas is conducted by "matrixed" personnel assigned to the Project Teams. These Project Teams are responsible for daily implementation and oversight for health and safety matters in the field.

As a continuation of the controls mentioned in S.12.2, WSSRAP has the following other resources and mechanisms in place to protect the health and safety of workers and the environment, and to measure the work performance.

1. Operational Readiness Reviews: This process is conducted for many onsite projects and involves a checklist of action items that are compiled by a team of professionals tasked with the project. The action items are comprehensive and comprise of details of the project that require satisfactory completion and sign off prior to the project being authorized to proceed.

2. Stop Work Policy: All employees at the WSSRAP are empowered to stop a work activity at any time, should they perceive an imminent danger situation that could negatively impact the work and endanger the life and health of the work crew. Stop Work Orders are formal orders issued to subcontractors and call for immediate cessation of all work activities. In order to restart operations, the affected subcontractor is required to submit a restart plan, conduct a root cause investigation, and correct the situation. The Project Director's signature is required prior to resuming operations.

3. Training Programs: WSSRAP has an onsite Training Department which offers all new employees sufficient training about the site and indoctrinates them on the health and safety aspects of conducting work for the project. All new employees receive General Employee Training (GET). Those employees who work in the controlled areas of WSSRAP also receive General Employee Radiological Training (GERT) and Safety Health and Radiation Protection (SHARP) Training.

4. Self-Assessments, Internal Audits, and Routine Surveillances by Peer Groups: These are some of the mechanisms in place to measure the adequacy of site controls. In addition, ALARA surveillances and 10 CFR 835 internal reviews are conducted by the ES&H Department on a regular basis. Internal Audits are normally conducted by the Quality Assurance Department and target various programmatic areas of operations. WSSRAP is also subject to annual health and safety audits by outside personnel: viz. Corporate Health and Safety Officers, and DOE Evaluation Teams. These formalized programs, along with follow up assessments on any corrective actions ensure the efficacy of the controls in place and provide the feedback necessary to maintain and/or improve necessary controls

5. Incident Reviews and Assessments: As a follow up to onsite incidents, it is customary at WSSRAP to assemble the team of individuals responsible for that work activity, along with supervisory and Management staff as necessary to review the incident, conduct root cause analysis, and resolve the situation such that future similar incidents can be avoided.

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6. Lesson's Learned Program: WSSRAP has a database of items that are compiled by onsite personnel who have learned valuable ideas and other information from particular situations. Items input into this database are usually those that could benefit future activities. A large proportion of items included into this database are health and safety-related.

7. Staff Organization to Support Operations: WSSRAP support staff is essentially a "Matrix" organization comprised of members from several onsite functional departments assigned to a Project Area. The departments responsible for the protection of worker health and safety, and that of the environment are the Environmental Safety and Health; Safety; and the Compliance Departments. Experienced senior staff members from each of these functional areas are matrixed to the various Project Areas, and are assigned a group of field support staff as necessary to conduct field oversight and implement WSSRAP's policies and procedures. Matrixed members are usually Industrial Hygienists, Health Physicists, Radiological Engineers, Waste Management Engineers, and Safety Supervisors drawn from the above departments. Project Management allocates budget resources for such coverage, and any increased requirements are authorized after appropriate justifications and staffing reviews are conducted.

In addition to matrixed members, most departments each have a group of core staff members who are assigned with the tasks of Health and Safety, and Environmental Program Management and Administration.

8. Changes to Staffing Resources: All staffing resources and requests are formally reviewed jointly by the DOE and Project Management for appropriateness and necessity on a routine basis. Support staff are usually reassigned to other upcoming tasks once their ongoing tasks are completed. Managers constantly review staffing levels and optimize them to match needs. The WSSRAP is expected to be completed in AD 2002. Staffing levels will match progress towards this completion, with decreases expected towards the end of the project.

PBS Comments:

Baseline Validation Narrative:

The WSSRAP baseline was last validated by a DOE-HQ team during a site visit in April 1994. The validated TEC was \$865 million.

In 1994 a replan was authorized and was completed in February 1995. The replan resulted in a TEC of \$986.7 million. The Baseline Change Proposal (BCP) documenting this replan was submitted to DOE-HQ. No response was received.

In the spring of 1998 the project TEC was reduced to \$905 million. This reduction was dictated by declining EACs and reduced risk associated with project maturity. The current baseline remains at \$905 million.

General PBS Information

Project Validated?	Yes	Date Validated:	4/30/1994
Has Headquarters reviewed and approved project?	No		
Date Project was Added:	3/10/1999		

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Baseline Submission Date: 7/1/1999

FEDPLAN Project? Yes

Drivers:	CERCLA	RCRA	DNFSB	AEA	UMTRCA	State	DOE Orders	Other
	Y	N	N	N	N	N	Y	N

Project Identification Information

DOE Project Manager: S. H. McCracken

DOE Project Manager Phone Number: 314-441-8978

DOE Project Manager Fax Number: 314-447-0739

DOE Project Manager e-mail address: steve.mccracken@wssrap-host.wssrap.com

Is this a High Visibility Project (Y/N):

Planning Section

Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006	
PBS Baseline (current year dollars)	436,436	0	436,436	72,546	72,546	74,064	74,064	72,444	68,779	75,305	50,737	22,561	0	0	0	
PBS Baseline (constant 1999 dollars)	427,088	0	427,088	72,546	72,546	74,064	74,064	72,444	67,364	72,239	47,670	20,761	0	0	0	
PBS EM Baseline (current year dollars)	316,951	0	316,951	52,233	52,233	46,660	46,660	54,333	52,272	56,479	38,053	16,921	0	0	0	
PBS EM Baseline (constant 1999 dollars)	309,927	0	309,927	52,233	52,233	46,660	46,660	54,333	51,197	54,180	35,753	15,571	0	0	0	
	2007	2008	2009	2010	2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070

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	2007	2008	2009	2010	2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS Baseline (current year dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Non-EM Costs included in the Cost Baseline

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Non-EM Category: Other													
Department of the Army	28	37	25	24	25	25	25						
	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
Non-EM Category: Other													
Department of the Army													

Baseline Escalation Rates

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	0.00%	0.00%	0.00%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%

Project Reconciliation

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Project Reconciliation

Project Completion Date Changes:

Previously Projected End Date of Project:

Current Projected End Date of Project: 9/30/2002

Explanation of Project Completion Date Difference (if applicable):

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):	Actual 1997 Cost:	52,233	Actual 1998 Cost:	46,660
Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	-98,893	Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):		-2,670
Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	-101,563			

Project Cost Changes

	Cost Adjustments	Reconciliation Narratives
Cost Change Due to Scope Deletions (-):		
Cost Reductions Due to Efficiencies (-):		
Cost Associated with New Scope (+):		
Cost Growth Associated with Scope Previously Reported (+):		
Cost Reductions Due to Science & Technology Efficiencies (-):		
Subtotal:	-101,563	
Additional Amount to Reconcile (+):	312,597	
Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	211,034	

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
WSSRAP Project Mission Complete	OR775-001		9/30/2002								
Site ROD Approved	OR775-002		9/30/1993							Y	

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Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Quarry Residuals ROD	OR775-003		11/30/1998							Y	
Site Groundwater ROD	OR775-004		7/31/1998							Y	
Start Quarry Bulk Waste Removal	OR775-005		5/31/1993								
Complete Bulk Waste Removal	OR775-006		3/31/1996								
Complete Building Dismantling	OR775-007		11/30/1994								
Start Vicinity Properties Remediation	OR775-008		8/31/1999								
Complete Vicinity Properties Remediation	OR775-009		10/31/1999								
Begin Disposal Facility Construction	OR775-010		3/31/1997								
Start Disposal Cell Operations	OR775-011		3/31/1998								
Weldon Sprint Disposal Facility Project Start	OR775-012		10/1/1996								

Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critical Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
WSSRAP Project Mission Complete	OR775-001				Y	Y					Project close out completed
Site ROD Approved	OR775-002	Y									Signature of regulators
Quarry Residuals ROD	OR775-003										Issue final ROD to EPA/MDNR
Site Groundwater ROD	OR775-004										Issue final ROD to EPA/MDNR
Start Quarry Bulk Waste Removal	OR775-005										Fill first truck for transport
Complete Bulk Waste Removal	OR775-006	Y									Complete subcontract closeout on work package 186.
Complete Building Dismantling	OR775-007	Y									Removal of superstructure of final process building

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Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critical Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Start Vicinity Properties Remediation	OR775-008										Notice to proceed issued to subcontractor for the first vicinity property.
Complete Vicinity Properties Remediation	OR775-009										PMC issues confirmation documentation for VP #6.
Begin Disposal Facility Construction	OR775-010	Y									Initiate cell sub-floor grading
Start Disposal Cell Operations	OR775-011	Y									Placement of first load of waste into the cell.
Weldon Sprint Disposal Facility Project Start	OR775-012			Y							

Performance Measure Metrics

Category/Subcategory	Units	1997-2006 Total	2007-2070 Total	1997-2070 Total	Actual Pre-1997	Planned 1997	Actual 1997	Planned 1998	Planned 1999	Planned 2000	Planned 2001	Planned 2002	Planned 2003	Planned 2004
RS														
Assess.	NR	2.00	0.00	2.00	12.00		1.00		2.00					
RS														
Cleanup	NR	16.00	0.00	16.00	3.00			3.00	2.00	6.00	4.00	1.00		
Fac.														
Decom.- Assess.	NF	0.00	0.00	0.00	2.00									
Fac.														
Decom- Cleanup	NF	2.00	0.00	2.00	1.00	1.00	1.00			1.00				
Rem. Waste														
Disposed	M3	1,147,492.10	0.00	1,147,492.10				590,851.10	447,494.00	109,049.00	98.00			

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Category/Subcategory	Units	Planned 2004	Planned 2005	Planned 2006	Planned 2007	Planned 2008	Planned 2009	Planned 2010	Planned 2011 - 2015	Planned 2016 - 2020	Planned 2021 - 2025	Planned 2026 - 2030	Planned 2031 - 2035
RS													
Assess.	NR												
RS													
Cleanup	NR												
Fac.													
Decom.- Assess.	NF												
Fac.													
Decom- Cleanup	NF												
Rem. Waste													
Disposed	M3												
Category/Subcategory	Units	Planned 2036 - 2040	Planned 2041 - 2045	Planned 2046 - 2050	Planned 2051 - 2055	Planned 2056 - 2060	Planned 2061 - 2035	Planned 2066 - 2070	Exceptions	Lifecycle Total			
RS													
Assess.	NR								6.00	23.00			
RS													
Cleanup	NR								2.00	23.00			
Fac.													
Decom.- Assess.	NF								1.00	3.00			
Fac.													
Decom- Cleanup	NF									3.00			
Rem. Waste													
Disposed	M3									109,147.00			

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Release Sites

Site Code	RSF ID	Change Flag	Description	Class/Subclass Name	Planned Assess. Year	Forecast Assess. Year	Actual Assess. Date	Planned Comp. Year	Forecast Comp. Year	Actual Comp. Date	Acc. Year	No Action	Comp. Status	RAD
WSSP	0001		RAIMS Unit #2457 \ Quarry Contaminated Pond Water	Surface and Groundwater/Surface Water	1999	1998	9/30/1998	2000	2001			N		Y
WSSP	0002		RAIMS Unit #2456 \ Quarry Bulk Waste Removal	Waste/Pits						10/31/1995		N		Y
WSSP	0003		RAIMS Unit #2458 \ Quarry Water Treatment Plant	Liquid Surface Impoundments/Lagoons			9/30/1993	2001				N		Y
WSSP	0007		RAIMS Unit #2449 \ Chemical Plant Soils	Miscellaneous/Other			9/30/1993	2002	2000			N		Y
WSSP	0008		RAIMS Unit #2467 \ Vicinity Properties (excluding #6)	Waste/Miscellaneous Surface Debris			9/30/1993	1998	1998	7/31/1998		N		Y
WSSP	0009		RAIMS Unit #2448 \ Busch Lakes 34, 35 & 36	Surface and Groundwater/Sediments			9/30/1993	2000	1999	10/31/1998		N		N
WSSP	0010		RAIMS Unit #2463 \ Southeast Drainage	Waste/Miscellaneous Surface Debris			11/27/1996	1998	1998	2/28/1998		N		Y
WSSP	0011		RAIMS Unit #2466 \ Transformer Pad (411)	Above Ground Material / Waste/Storage Yards and Pads						9/30/1993		N		N
WSSP	0012		RAIMS Unit #2468 \ Vicinity Property #9	Waste/Miscellaneous Surface Debris						2/29/1996		N		Y
WSSP	0014		RAIMS Unit #2443 \ Asbestos Storage Area	Miscellaneous/Other			9/30/1993	2002	1998	6/30/1998		N		Y
WSSP	0015		RAIMS Unit #2453 \ Material Staging Area	Above Ground Material / Waste/Storage Yards and Pads			9/30/1993	2000	1999	11/30/1998		N		Y
WSSP	0016		RAIMS Unit #2454 \ Material Staging Area w/Waste	Above Ground Material / Waste/Storage Yards and Pads			9/30/1993	1998	1998	7/31/1998		N		Y
WSSP	0017		RAIMS Unit #2460 \ Site Contaminated Surface Water	Surface and Groundwater/Sediments			9/30/1993	2000	2000			N		Y

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Release Sites

Site Code	RSF ID	Change Flag	Description	Class/Subclass Name	Planned Assess. Year	Forecast Assess. Year	Actual Assess. Date	Planned Comp. Year	Forecast Comp. Year	Actual Comp. Date	Acc. Year	No Action	Comp. Status	RAD
WSSP	0018		RAIMS Unit #2444 \ Ash Pond Storage Area	Surface and Groundwater/Sediments			9/30/1993	2000	2000			N		Y
WSSP	0020		RAIMS Unit #2462 \ Site Water Treatment Plant	Liquid Surface Impoundments/Evaporation Ponds / Pits			9/30/1993	2000	2000			N		Y
WSSP	0021		RAIMS Unit #2465 \ Temporary Storage Area w/Waste	Above Ground Material / Waste/Storage Yards and Pads			9/30/1993	2000	1998	7/31/1998		N		Y
WSSP	0022		RAIMS Unit #2464 \ Temporary Storage Area	Above Ground Material / Waste/Storage Yards and Pads			9/30/1993	2000	2000			N		Y
WSSP	0023		RAIMS Unit #2452 \ Inner Quarry Residuals	Waste/Pits	1999	1998	9/30/1998	2001	2000			N		Y
WSSP	0024		RAIMS Unit #2455 \ Quarry Area Groundwater	Surface and Groundwater/Groundwater Plumes	1999	1998	9/30/1998	2001				N		N
WSSP	0025		RAIMS Unit #2451 \ Femme Osage Slough	Surface and Groundwater/Surface Water	1999	1998	9/30/1998	2001	2002			N		N
WSSP	0026		RAIMS Unit #2461 \ Site Groundwater	Surface and Groundwater/Groundwater Plumes	1999	2000		1999	2001			N		N
WSSP	0027		RAIMS Unit #2447 \ Burgermeister Spring	Surface and Groundwater/Surface Water	1999	2000		1999	2001			N		N
WSSP	3050		RAIMS Unit #2487 \ Vicinity Property #6	Above Ground Material / Waste/Debris Piles	1993			2000	2000			N		Y

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Facility Decommissioning

Site Code	RSF ID	Change Flag	Description	Class/Subclass	Hazard	Plan. Assess. Year	Fore. Assess. Year	Actual Assess. Date	Plan. Deac. Year	Fore. Deac. Year	Actual Deac. Date	Plan. Comp. Year	Fore. Comp. Year	Actual Comp. Date	Acc. Year	No Action	Comp. Status	RAD
WSSP	0005		RAIMS Unit #2446 \ Building Superstructures	Buildings & Equipment\Other Buildings	Non-Nuclear Facility									12/31/1994		N		Y
WSSP	0006		RAIMS Unit #2445 \ Building Foundations	Buildings & Equipment\Other Buildings	Non-Nuclear Facility			9/30/1993				1997		8/8/1997		N		Y
WSSP	0013		RAIMS Unit #2459 \ RCRA Storage (434)	Buildings & Equipment\Other Buildings	Non-Nuclear Facility			9/30/1993				2000	2000			N		Y

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